

What is Claimed is:

1. A semiconductor light emitting device comprising:
an active layer composed of a nitride based
5 semiconductor;

Sub 1
Sub 1
A
a cladding layer formed on said active layer, composed
of a nitride based semiconductor of a first conductivity type,
and having a flat portion and a ridge portion formed on the
flat portion; and

10 a first current blocking layer formed on said flat
portion and on sidewalls of said ridge portion of said
cladding layer and composed of a high-resistive nitride based
semiconductor containing impurities.

15 2. The semiconductor light emitting device according
to claim 1, wherein

Sub 2
Sub 2
B
said impurities contain at least one of zinc,
beryllium, calcium, and carbon.

20 3. The semiconductor light emitting device according
to claim 1, wherein

said first current blocking layer has a resistance
value of not less than $1.5 \Omega \cdot \text{cm}$.

25 4. The semiconductor light emitting device according

to claim 1, further comprising

a second current blocking layer formed on said first current blocking layer and composed of a nitride based semiconductor of a second conductivity type opposite to said 5 first conductivity type.

Jack B.
5. The semiconductor light emitting device according to claim 1, wherein

10 the thickness of said first current blocking layer is not less than 0.5 μ m.

6. The semiconductor light emitting device according to claim 5, wherein

15 the thickness of said first current blocking layer is not less than 1.0 μ m.

7. The semiconductor light emitting device according to claim 1, wherein

20 the thickness of the flat portion of said cladding layer is not more than 0.3 μ m.

8. The semiconductor light emitting device according to claim 7, wherein

25 the thickness of the flat portion of said cladding layer is not more than 0.08 μ m.

Sub B1
~~9. The semiconductor light emitting device according~~

~~to claim 1, wherein~~

~~said nitride based semiconductor contains at least one~~

~~5 of boron, gallium, aluminum, indium, and thallium.~~

Sub A2
~~10. A semiconductor light emitting device comprising~~

~~an active layer composed of a nitride based~~

~~semiconductor;~~

~~10 a cladding layer formed on said active layer, composed~~

~~1 of a nitride based semiconductor of a first conductivity type,~~

~~and having a flat portion and a ridge portion formed on the~~
~~flat portion,~~

~~said cladding layer having a recess on said flat~~

~~15 portion along both sidewalls of said ridge portion; and~~

~~a first current blocking layer formed on said flat~~
~~portion and on the sidewalls of said ridge portion such that~~
~~it is embedded in said recess of said cladding layer.~~

Sub B2
~~20 11. The semiconductor light emitting device according~~

~~to claim 10, wherein~~

~~said first current blocking layer is composed of a~~
~~high-resistive nitride based semiconductor containing~~
~~impurities.~~

12. The semiconductor light emitting device according to claim 10, wherein

 said impurities contain at least one of zinc, beryllium, calcium, and carbon.

5

13. The semiconductor light emitting device according to claim 10, wherein

 said first current blocking layer has a resistance value of not less than $1.5 \Omega \cdot \text{cm}$.

10

14. The semiconductor light emitting device according to claim 10, further comprising

 a second current blocking layer formed on said first current blocking layer and composed of a nitride based semiconductor of a second conductivity type opposite to said first conductivity type.

15

15. The semiconductor light emitting device according to claim 10, wherein

20

 the thickness of said first current blocking layer is not less than $0.5 \mu\text{m}$.

25

16. The semiconductor light emitting device according to claim 15, wherein

 the thickness of said first current blocking layer is

not less than 1.0 μ m.

17. The semiconductor light emitting device according to claim 10, wherein

5 the thickness of the flat portion of said cladding layer is not more than 0.3 μ m.

18. The semiconductor light emitting device according to claim 17, wherein

10 the thickness of the flat portion of said cladding layer is not more than 0.08 μ m.

19. The semiconductor light emitting device according to claim 10.

15 said nitride based semiconductor contains at least one of boron, gallium, aluminum, indium, and thallium.